

SUPPLEMENTARY INFORMATION

6. Movie S1

This movie shows the motion of two cells pushed from left to right into the last 2 mm of the capillary tip by two different pressure heads, 300 Pa (top) and 700 Pa (bottom). The same capillary is used in both cases, and the movie is a montage of two different recordings stacked on top of each other. For both pressure heads, 3 dynamical regimes can be observed (see main text): regime I, the cells act as passive tracers in the Poiseuille regime; regime II, the cells slow down significantly

and eventually get arrested; regime III, the post-lysis cytoplasmic content of the cells follow the flow as passive tracers.

7. Movie S2

This movie shows the cell in the tube (top) along with a magnified view (center) at the onset of regime III, when the cell lyses (see main text, and movie S1). The slider at the bottom of the movie indicates time in milliseconds. The movie is played back and forth before (time: 1475 ms) and after (time: 1500 ms) lysis to show the retraction of the back of the cell: between these two frames, the back of the cell moves significantly more than the front.